

WHAT IS CLAIMED IS:

1. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

a light emitter operated by the game player and emitting light;

a position detector detecting light from the light emitter to detect a spatial position of the light emitter; and

a control unit controlling a game, based on the spatial position detected by the position detector.

2. A game apparatus operated by motions of a game players opposed to a display screen, comprising:

a light emitter disposed at a prescribed position and emitting light;

a light detector operated by the game player and detecting light;

a position detector detecting light from the light emitter to detect a spatial position of the light detector; and

a control unit controlling the game, based on the spatial position detected by the position detector.

3. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

a sound wave generator operated by the game player and generating sound waves;

a position detector receiving sound waves from the sound wave generator to detect a spatial position of the sound wave generator; and

a control unit controlling a game, based on the spatial position detected by the position detector.

4. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

a sound wave generator disposed at a prescribed position and generating sound waves;

a sound wave receiver operated by the game player and receiving the sound waves;

a position detector detecting a spatial position of the sound wave receiver for the sound waves from the sound wave generator by being received by the sound wave receiver; and

a control unit controlling a game, based on the spatial position detected by the position detector.

5. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

an operation device operated by the game player and connected to a cable extended from a prescribed

position;

a position detector measuring a length of the cable to detect a spatial position of the operation device; and

a control unit controlling a game, based on the spatial position detected by the position detector.

6. A game apparatus operated by motions of a game players opposed to a display screen, comprising:

an operation device including an operation unit operated by the game player connected by a flexible cable to a signal unit transmitting or receiving a position signal;

a position detector receiving or transmitting the position signal from or to a signal unit of the operation device to detect a spatial position of the operation device, based on the spatial position; and

a control unit controlling a game, based on the spatial position detected by the position detector.

7. A game apparatus according to any one of claims 1 to 6, wherein

a command display commanding a prescribed operation to the game player is presented on the display screen; and

the control unit judges whether or not the game player has operated in accordance with the prescribed operation commanded by the command display, and controls the game, based on a judgement result.

8. A game apparatus according to claim 7, wherein

on the display screen, a plurality of indicative positions to which the game player can indicate are displayed, and a command mark is blown out at a preset blowout position and moved to one of said plurality of indicative positions; and

the control unit judges at a timing that the command mark arrives at said one of the indicative positions whether or not the game player has indicated said one of the indicative positions.

9. A game apparatus according to claim 8, wherein

the command mark contains a command of a specific operation;

the control unit judges at a timing that the command mark arrives at said one of the indicative positions whether or not the game player has made the specific operation.

10. A game apparatus according to claim 8,  
wherein

the light emitter is provided on the operation  
device operated by the game player in the hand;

said plurality of indicative positions are displayed  
at locations where the game player can operate the  
control unit with himself positioned at the center.

11. A game apparatus according to claim 9,  
wherein

the light emitter is provided on the operation  
device operated by the game player in the hand;

said plurality of indicative positions are displayed  
at locations where the game player can operate the  
control unit with himself positioned at the center.

12. A game apparatus according to claim 8,  
wherein

the light emitter is put on a part of the body of  
the game player; and

said plurality of indicative positions are displayed  
at locations where the game player can operate the  
control unit with himself at the center.

13. A game apparatus according to claim 9,  
wherein

the light emitter is put on a part of the body of the game player; and

said plurality of indicative positions are displayed at locations where the game player can operate the control unit with himself at the center.

14. A game apparatus according to claim 10, wherein

the operation device has a shape of a percussion musical instrument which is operated, gripped in the hand, and further comprises vibration detector detecting a vibrated state of the operation device; and

the control unit controls the game in accordance with a position and/or the vibrated state of the operation device.

15. A game apparatus according to claim 11, wherein

the operation device has a shape of a percussion musical instrument which is operated, gripped in the hand, and further comprises vibration detector detecting a vibrated state of the operation device; and

the control unit controls the game in accordance with a position and/or the vibrated state of the operation device.

16. A game apparatus according to claim 7,  
wherein

on the display screen, a plurality of indicative positions which the game player can indicate are displayed, and a command mark is blown out at a preset blowout position and moved to one of said plurality of indicative positions; and

the control unit judges at a timing that the command mark arrives at said one of the indicative positions whether or not the game player has indicated said one of the indicative positions, and a judgement result is displayed near the position of the blowout position.

17. A game apparatus according to claim 7,  
wherein

a plurality of game players operate, and a game is controlled based on a level of agreement of the operation between the game players.

18. A game apparatus according to claim 7,  
wherein

a plurality of indicative positions which the game player can indicate are displayed on the display screen;  
and

the control unit allocate operation sound to said

plurality of indicative positions, and when the game player operates, the operation sounds which are different corresponding to said plurality of indicative positions are generated.

19. A game apparatus according to claim 7, wherein

a plurality of indicative positions which the game player can indicate are displayed on the display screen; and

the control unit temporarily prohibits a operation of indicating one selected out of said plurality of indicative positions, and displays that the indicative position is prohibited.

20. A game apparatus according to claim 1, wherein

the light emitter is provided in operation device operated by the game player in the hand or on a part of the body of the game player;

the position detector detects based on the detected spatial position of the light emitter whether or not the game player has take a specific pose and retained the pose for a prescribed period of time; and

the control unit controls the game, based on a



detected result of the pose.

21. A game apparatus according to claim 8,  
wherein

said plurality of indicative positions are different  
from each other corresponding to a height of the game  
player.

22. Input device used in a game apparatus according  
to claim 1,

the input device being operated by a game player and  
including light emitter which lights.

23. Input device used in a game apparatus according  
to claim 2,

the input device being operated by a game player and  
including light emitter which lights.

24. Input device used in a game apparatus according  
to claim 3,

the input device being operated by a game player and  
including light emitter which lights.

25. Input device used in a game apparatus according  
to claim 4,

the input device being operated by a game player and  
including light emitter which lights.

26. Input device used in a game apparatus according

to claim 5,

the input device being operated by a game player and including light emitter which lights.

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27. Input device used in a game apparatus according to claim 6,

the input device being operated by a game player and including light emitter which lights.

28. A game method to be executed on the game apparatus according to claim 1.

29. A game method to be executed on the game apparatus according to claim 2.

30. A game method to be executed on the game apparatus according to claim 3.

31. A game method to be executed on the game apparatus according to claim 4.

32. A game method to be executed on the game apparatus according to claim 5.

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33. A game method to be executed on the game apparatus according to claim 6.

34. A method for adjusting a game apparatus including:

an operation device operated by a game player, and transmitting or receiving a position signal;

a position detector receiving or transmitting the position signal from or to the operation device, and detecting a spatial position of the operation device, based on the position signal; and

a control unit controlling a game, based on the spatial position detected by the position detector,

the position signal being not transmitted, and an external position signal being detected; and when the external position signal is detected, a transmitting timing of the position signal being changed.

35. A method for adjusting a game apparatus including:

an operation device operated by a game player, and transmitting or receiving a position signal;

a position detector receiving or transmitting the position signal from or to the operation device, and detecting a spatial position of the operation device, based on the position signal; and

a control unit controlling a game, based on the spatial position detected by the position detector,

a transmitting timing of the position signal being different from each other, based on a connection position where the operation device is connected.

36. A storage medium for storing a program for executing a method according to any one of claims 28 to

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*part of*  
37. A game apparatus according to claim 7, wherein

the operation device is operated by a game player, held in the hand, and has a shape like a percussion musical instrument, and

the operation device includes hit detector detecting hitting the operation device.

38. A game apparatus according to claim 7, wherein

a plurality of indicative positions which the game player can indicate is displayed on the display screen; and

the control unit displays which one of said plurality of indicative positions the operation device indicates.

39. A game apparatus according to claim 7, wherein

on the display screen, a plurality of indicative positions the game player can indicate are displayed, and a command mark is blown out at a preset blowout position

and moves to one of said plurality of indicative positions; and

the control unit judges, at a timing that the command mark arrives at said one of said indicative positions, whether or not the game player has indicated said one of said indicative position, and displays a judgement result near said one of said indicative positions.

40. A game apparatus according to claim 7, wherein

on the display scree, a plurality of indicative position which the game player can indicate are displayed, and a movement indication among plural ones selected out of said plurality of indicative positions is displayed; and

the control unit judges whether or not the game player has moved the operation device along the movement indication.

41. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

an operation device including a vibration detector detecting a vibration state, and held in the hand of the game player, connected to a casing of the game apparatus

and indicating a desired spatial position spaced from the center of a position of the game player;

a display unit displaying, on the display screen, a command display which indicates a prescribed position for the operation device to be moved to and a motion for the game player to make;

a judging unit judging whether or not, by an operation of the operation device by the game player, the operation device has indicated the prescribed position presented on the command display to judge whether or not the game player has made a motion conforming to the prescribed motion indicated on the command display; and

a control unit controlling a game, based on a judgement made by the judging unit.

42. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

an operation device including a vibration detector detecting a vibration state, and held in the hand of the game player, connected to a casing of the game apparatus and indicating a desired spatial position spaced from the center of a position of the game player;

a display unit displaying, on the display screen, a command display which indicates a prescribed position for

the operation device to be moved to and a motion for the game player to make;

a judging unit judging whether or not, by an operation of the operation device by the game player, the operation device has indicated the prescribed position presented on the command display to judge whether or not the game player has made a motion conforming to the prescribed motion indicated on the command display; and

a control unit controlling a game, based on a judgement made by the judging unit,

the display unit displaying game displays opposed to the game player, and blowing out at a prescribed blow-out position on the display screen at least two command marks indicating at least two operations different from each other in accordance with a rhythm of music, and commanding the prescribed position for the operation device to be moved to, by a blowing-out direction thereof.

43. A game apparatus operated by motions of a game player opposed to a display screen, comprising:

an operation device including a vibration detector detecting a vibration state, and held in the hand of the game player, connected to a casing of the game apparatus

and indicating a desired spatial position spaced from the center of a position of the game player;

a display unit displaying, on the display screen, a command display which indicates a prescribed position for the operation device to be moved to and a motion for the game player to make;

a judging unit judging whether or not, by an operation of the operation device by the game player, the operation device has indicated the prescribed position presented on the command display to judge whether or not the game player has made a motion conforming to the prescribed motion indicated on the command display; and

a control unit controlling a game, based on a judgement made by the judging unit,

the display unit displaying game displays opposed to the game player, displaying a prescribed indicative position, and blowing out at a prescribed blow-out position on the display screen at least two command marks indicating at least two operations different from each other in accordance with a rhythm of music, and indicating a track to the prescribed indicative position by a blowing-out direction thereof so that the operation device is moved to the prescribed indicative position.



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44. A game apparatus operated by a motion of game player, comprising:

an operation device operated by the game player;  
and

a display unit displaying game displays opposed to the game player,

the display unit blowing out at a prescribed blow-out position on the display screen at least two command marks indicating at least two operations different from each other in accordance with a rhythm of music, and commanding the prescribed position for the operation device to be moved to, by a blowing-out direction.

45. A game apparatus operated by a motion of game player, comprising:

an operation device operated by the game player;  
and

a display unit displaying game displays opposed to the game player,

the display unit displaying a prescribed indicative position, and blowing out at a prescribed blow-out position on the display screen at least two command marks indicating at least two operations different from each other in accordance with a rhythm of music, and

indicating a track to the prescribed indicative position by a blowing-out direction thereof so that the operation device is moved to the prescribed indicative position.

46. A game apparatus operated by a motion of game player, comprising:

an operation device operated by the game player;  
and

a display unit displaying game displays opposed to the game player,

the display unit displaying a plurality of indicative positions, displaying command marks of a plurality kinds at a prescribed blow-out position on the game screen moving, in accordance with a rhythm of music, along a track to one of said plurality of indicative positions,

when the command marks arrive at the selected indicative position, the game player making motions of the kinds commanded by the command marks.

47. A method for presenting displays of a game operated by a motion of a game player opposed to a display screen,

command marks for the game player being displayed on the display screen so as to be blown out one by one in

accordance with a rhythm of music at a prescribed blow-out position,

the command marks containing at least two operational commands different from each other, and a blowing-out direction thereof indicating a command of moving an operation device to a prescribed position.

48. A method for presenting displays of a game operated by a motion of a game player opposed to a display screen,

a prescribed indicative position being displayed on the display screen,

command marks for the game players being displayed so as to be blow out at a prescribed blow-out position in accordance with rhythm of music and moved along a track to the prescribed indicative position,

the command marks containing at least two or more operational commands different from each other, the movement track commands movement of an operation device to the prescribed indicative position.

49. A method for presenting displays of a game operated by a motion of a game player opposed to a display screen,

a plurality of indicative positions being displayed

on the display screen,

command marks of a plurality of kinds for the game player being blow out at a prescribed blow-out position in accordance with a rhythm of music and moved along a track to one selected out of said plurality of indicative positions,

when the command marks arrive at the selected indicative position, motions to be made by the game player being commanded by the kinds of the command marks.

50. A game apparatus operated by a motion of a game player opposed to a display screen, comprising:

a music output unit outputting music;

a pair of operation devices each including a vibration detector detecting a vibration state, and held respective in the hands of the game player, connected to a casing of the game apparatus, and indicating a desired spatial position spaced from the center of a position of the game player;

a display unit displaying a game display opposed to the game player, and displaying a plurality of indicative positions in the game display, command marks for the game player being displayed so as to be blow out at a

prescribed blow-out position on the display screen in accordance with a rhythm of music, the command marks indicating at least two operations different from each other, and to be moved along a track to one selected out of said plurality of indicative positions, a blowing-out direction thereof indicating a command of moving the operation device to a prescribed position;

a judging unit judging whether or not the operation device has been moved to the selected indicative position on the command display, based on an operation of the operation device by the game player in accordance with music outputted by the music output unit, and judging whether or not the game player has made motions conforming to prescribed motions commanded by the command marks at the timing when the command marks arrive at the selected indicative position; and

a control unit controlling the game, based on a judgement of the judging unit.

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